

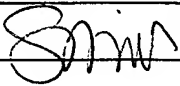
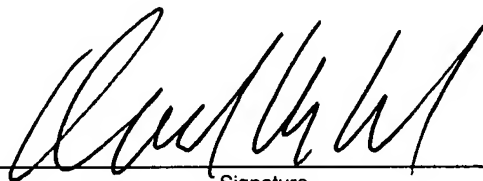


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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>February 13, 2009</u></p> <p>Signature <u></u></p> <p>Typed or printed name <u>Sandra Pires</u></p>		Application Number	Filed
		10/808,781	March 25, 2004
		First Named Inventor	
		Fernando OLIVEIRA, et al.	
		Art Unit	Examiner
		2164	Sathyanaraya R. PANNALA
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>			
<p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. 33,978 Registration number _____</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>		<p><u></u> Signature Donald W. MUIRHEAD</p> <p>_____ Typed or printed name (508) 898-8603</p> <p>_____ Telephone number February 13, 2009</p> <p>_____ Date</p>	
<p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</p>			

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: :  
Fernando OLIVEIRA, *et al.* :  
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Appl. No.: 10/808,781 : Art Unit: 2164  
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Filed: March 25, 2004 : Examiner: PANNALA,  
 : Sathyanaraya R.  
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For: **CONTINUOUS DATA BACKUP** : Docket No.: EMS-07401

**STATEMENT SUBMITTED WITH PRE-APPEAL BRIEF REQUEST**

This paper is being submitted along with a Notice of Appeal and Pre-Appeal Brief Request and contains arguments and remarks in response to the Final Office Action dated October 28, 2008, and the Advisory Action dated January 27, 2009, received for the above-captioned U.S. patent application.

Applicants submit that the prosecution of this application is in a confused state following the Final Office Action and the Advisory Action. The Examiner does not appear to be adequately considering all features of the currently-pending claims. Applicants are entitled to a clearly-written Office Action that sets forth all of the objections and rejections that are being maintained by the Examiner and that indicates examination of all features of the currently-pending claims so that Applicants can formulate a cogent response, including, as appropriate, an Appeal Brief. Applicants attempt to clarify and address below what Applicants believe is the current state of this prosecution.

As an initial matter, Applicants submit that to the extent the objection to the summary of the specification as set forth in the Final Office Action has been maintained, the objection should be withdrawn. Applicants refer to the remarks in Applicants' prior response and submit that this trivial and invalid objection has previously been addressed and traversed.

Applicants note that the Advisory Action indicates that Applicants' amendments submitted in response to the Final Office Action have not been entered. However, Applicants point out that the amendments made in Applicants' response to the Final Office Action concerned amending claims 15-20 to recite a computer-readable storage medium storing computer software instead of computer software stored on a computer-readable medium in response a rejection under 35 U.S.C. 101. The Advisory Action, however, does not mention the 101 rejection. The Advisory Action suggests that the above-noted amendment requires further consideration and search of the prior art and so will not be

entered. Applicants dispute this characterization, however, and submits the amendments, made in accordance with the MPEP and recent court precedent, should be entered and the rejection under 35 U.S.C. 101 withdrawn to place the application in better form for appeal for addressing the substantive prior art rejections. Furthermore, in accordance with the remarks herein, Applicants submits that the Final Office Action was not a proper Final Office Action because the Examiner did not fully consider all of the timely-amended features of the currently-pending claims. Accordingly, for the reasons set forth herein, Applicants submits that the finality of the Final Office Action dated October 28, 2008 should be withdrawn and, at least, a new Office Action issued that addresses the points raised by herein by Applicants and in which the above-noted amendments are entered and considered.

In support of the above-noted request that the Final Office Action be withdrawn in view of the deficiencies therein, Applicants submits that the Advisory Action makes no mention of the rejections under 35 U.S.C. 112, first paragraph, that were set forth in the Final Office Action involving the term "restoration state". At issue here is that neither the Advisory Action nor the Final Office Action appears to be fully considering Applicants' currently-pending claims (as timely amended in Applicant's response to Office Action filed July 3, 2008) that recite the feature *wherein the journal entry pointing to the first storage location containing the old data provides a restoration state corresponding to the old data, wherein the restoration state is accessible after writing the new data, and wherein the new data and subsequent new data are kept from overwriting the hold data corresponding to the journal entry*. Neither the Advisory Action nor the Final Office Action include any reasoned statements involving examination of the above-noted features recited by Applicants in view of the prior art.

To the extent the above-noted 112 rejection is still being maintained, Applicants refer to the remarks set forth in Applicants' response filed January 5, 2009 in which Applicants traversed the Examiner's conclusion that the term restoration state, as used in the above-noted features recited by Applicants, is not supported in the specification. Applicants direct specific attention, for example, to page 14, line 8 page 4 and Figures 5, 6 and 7 of the originally-filed specification. Specifically, Applicants note the explicit discussion of using a journal to keep track of old data store areas, and then restoring a logical device to a prior state of the data using a journal entry. Applicants also note on page 14, line 21: "Thus, for example, it is possible to restore the logical device 152 to the state shown by the diagram 160 of Figure 6 by simply using the journal entry 174..." and on page 15, lines 3-4: "Similarly, it is possible to restore to the logical device 152 to the state shown by the diagram of 150 of Figure 5 by using the journal entries 166, 174...." Applicants further point out that elsewhere

throughout the specification is further discussion of the use of journal entries to restore devices to states that included old data. Applicants submit that the currently-pending claims are explicitly supported by the specification and drawings and are entitled to full consideration and examination.

Applicants address below the rejections on prior art grounds involving U.S. Patent No. 7,047,355 to Nakatani, et al. (hereinafter "Nakatani") in view of U.S. Patent No. 6,510,986 to Akutsu, et al. (hereinafter "Akutsu"). However, Applicants point out again that the remarks in the Final Office Action and the Advisory Action indicate that the Examiner has not consider Applicant's above-noted features of the currently-pending claims involving restoration states. Accordingly, the statement of the rejections set forth in the Office Action are largely restatements of previously-stated rejections that do not appear directed to all of the features of the currently pending claims. As discussed herein, Applicants submit that all the features of currently-pending claims are entitled to examination.

Further, Applicants note that the discussion on page 10 of the Final Office Action appears to be the only substantive remarks in the Final Office Action that respond to the remarks and amendments set forth in Applicants' prior response. However, in this portion of the Office Action (page 10), the Office Action characterizes Applicants argument as a "continuous argument", without any further explanation, and neither the Final Office Action nor the Advisory Action appear to address any of the other arguments previously submitted by Applicants. Specifically, Applicants' previously-stated arguments that do not appear to have been adequately considered or responded to by the Examiner include: (1) the additional features recited by Applicants involving restoration state; (2) arguments concerning the teaching away of Nakatani from the proposed combination with Akutsu; and (3) arguments concerning the explicit disclosure of Akutsu that directly contrasts with Applicants' presently-claimed invention. Accordingly, Applicants again submit below arguments for all of the above-noted points which do not appear to have adequately addressed in the prosecution record by the Examiner. Applicants submit that Applicants are entitled to an Office Action that clearly sets forth a reasoned examination of these points that have been previously and timely raised by Applicants.

Applicants recite a system for managing data writes that include a journal that keeps track of all of the old data storage areas corresponding to each write of new data to a storage device. Applicants refer to FIGS. 5, 6 and 7 of the originally-filed specification in which is shown a series of new writes to a storage device and the corresponding use of journal entries to keep track of the locations of old data in the storage device. Accordingly, Applicants' presently-claimed invention provides a method

and device for continuous data backup in which a storage device can easily be restored to an earlier state through the use of maintained journal entries and stored old data that is maintained in the storage device, and specifically as recited in the above-noted feature of Applicants currently-pending claims. (See, for example, page 14, line 8 to page 15, line 4 of the originally-filed specification.)

The Final Office Action cites to Figures 4 and 6, col. 8, lines 30-34 and col. 9, lines 61-65 of Nakatani as disclosing "writing the new data to the new storage space at the second location, wherein the old data is maintained in the first storage location after writing the new data to the new storage space at the second storage location." However, these portions of Nakatani disclose allocation of an area of a required size for a journal log area and then incrementing an end pointer in a buffer memory by the size of the allocated area. Nakatani discloses using data in the journal logs to execute flush processing in which updated data is read from the journal log storing area into a cache. (See Col. 5, lines 6-13 of Nakatani). Nakatani specifically discloses that:

When the server 1 receives the flush processing completion notification from the storage system 2, the file system manager 12 dequeues the dirty data, which is stored in the buffer memory of the server 1, from the dirty queue. As a result, *the storage area in the buffer memory 13 where the dirty data has been stored is released for use in storing other data.* (Col. 5, lines 38-44 of Nakatani) (emphasis added)

Nakatani 's journal log is disclosed as being provided for new data written to a buffer memory of a storage device before being written to a storage system. Nakatani further states:

The journal log is provided to separately store a file update history in the storage system 2 because the contents of data updating executed in the buffer memory 13 of the server 1 may be lost because of a failure before data is updated in the storage area in the storage system 2. *Therefore, the journal log is not necessary once data is updated in the storage area of the storage system 2.* (Col. 7, lines 39-45 of Nakatani.) (emphasis added)

Nakatani discloses a journal log system in which new updated data that is to be written to a storage system is first stored in a buffer memory in storage locations that are logged into a journal. That is, the journal log disclosed by Nakatani is for ensuring the correct writing of new data to a storage device in the event of a failure before the new data is updated in the storage area.

Accordingly, Applicants submit that Nakatani does not disclose maintaining old data in a first storage location after writing of new data to a new storage space at a second storage location as is claimed by Applicants. The Final Office Action then cites to Akutsu as disclosing that a journal entry is maintained after writing new data. However, before addressing the specific features of Akutsu, Applicants point out that, as noted above, Nakatani's disclosure explicitly states, for example, that:

"Therefore, the journal log is not necessary once data is updated in the storage area of the storage system." (Col. 7, lines 39-45 of Nakatani.) Nakatani's system explicitly teaches away from the concept of a journal log as providing a restoration state for restoring a storage device to a state corresponding to old data. Instead, Nakatani's system provides for deleting a journal log once data has been written to a storage system and may therefore be flushed from buffer memory. Applicants submit that nothing in Nakatani would lead one of ordinary skill in the art to look for a teaching of maintaining a journal entry to restore a storage device to a state corresponding to old data. Indeed, Nakatani's device explicitly provides for the release from storage space of "dirty data." Accordingly, Applicants submit that the proposed combination of Nakatani with Akutsu to attempt to replicate the features of the Applicants' presently-claimed invention is not supported by Nakatani and instead is explicitly taught away from by Nakatani.

Turning to the citation to Akutsu, Applicants respectfully submit that, even if combined with Nakatani, Akutsu does not overcome the above-noted deficiencies of Nakatani with respect to Applicants' presently-claimed invention. The Office Action cites to Akutsu as disclosing maintaining electronic journal data subjected to writing in a buffer means, citing specifically to col. 4, lines 54-59 of Akutsu as teaching "maintaining the journals after writing new data." However, Applicants direct attention to the immediately following lines concerning release of the storage area to allow new data to overwrite the old data in the storage area. Specifically, Akutsu states: "On the other hand, when the writing into the storage medium is successful (i.e. when the storage amount in the storage medium reaches the predetermined value), *an area in the buffer means storing the electronic journal data subjected to the writing is released to allow new electronic journal data to be overwritten in that area.*" (emphasis added) (See col. 5, lines 3-9 of Akutsu; see also col. 4, lines 60-67 of Akutsu.) Accordingly, Applicants submit that Akutsu does not provide for maintaining journal entries. In particular, Applicants also submit that, although not addressed by the Examiner, Akutsu does not provide for a restoration state corresponding to a state of old data, and does not disclose the above-noted features involving a restoration state that are recited by Applicants.

Accordingly, Applicants submit that neither Nakatani nor Akutsu, taken alone or in combination, teach or fairly suggest at least the above-noted features as claimed by Applicants. For the other rejections under 35 U.S.C. 103(a) using the Testardi reference (U.S. Patent No. 7,013,379), Applicants submit that Testardi does not overcome the above-noted deficiencies of the Nakatani and Akutsu references with respect to Applicants' independent claims.